

Biehl International Research Fellowship
Proposal:

What motivates the resistance among residents of St.
Barthélemy to the island's waste-sorting
regulations?

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Introduction

St. Barthélemy (also known as St. Barts or St. Barth) is located in the Leeward Islands of the Caribbean; its small size and geographic characteristics make it particularly interesting when considering issues such as waste management and freshwater production. At only 23 km², there is no choice but to create innovative and effective means of waste disposal. Furthermore, there are no natural sources of freshwater on the island. Catchment of rainwater has been the only resource in the past, however today the people of St. Barth rely partly on the desalination of seawater. To address these challenges, a waste-to-energy (WTE) facility was constructed in 2001. Here, waste is sorted into three categories: that which can be recycled and must be exported elsewhere, that which can be reused locally (mostly glass), and that which can be burned in the incinerator. When combustible material is burned, steam is captured and sent to the desalination plant where its thermal energy is used to produce drinking water from seawater. (Fielding 2014).

While this may seem like an efficient system, there are instances when the island does not produce enough combustible waste to power the desalination facility. This occurs mainly during the summer months when there are fewer tourists. Without adequate fuel, the island's freshwater supply is threatened. A potential challenge that further exacerbates this problem is composting. While composting is ordinarily seen as a positive environmental activity, in St. Barth the local government is in the process of implementing an island-wide municipal composting program, which, at its proposed scale, has the potential to redirect organic waste away from the incinerator. The future interactions between the composting program and the incinerator are yet to be seen (Fielding 2014).

The waste disposal process begins at the household level where residents have been asked to sort their garbage before it is sent to the incinerator. It has been observed, however, that many locals are reluctant to participate. There have been marked instances of defiance where people place garbage in the wrong receptacle--apparently intentionally--or refuse to sort at all and place everything in a single bin (Fielding 2014). My research will investigate this observation in more detail. Why do the residents of St. Barthélemy refuse to participate in the sorting of waste? Are the reasons political, economic, nationalistic? This question is important because it will shed light on the perspective of a small island community regarding sustainability and how such a society chooses to interact with its environment. This voice is often quiet in today's world, especially in places like St. Barth where the tourism sector so overwhelmingly dominates the local culture and economy. Often local people are asked, directly or indirectly, to suppress their own autonomy in favor of the needs or desires of the tourists. Can the lack of compliance with trash-sorting regulations be seen as a stance against the dominance of tourism, with its abundant use of water for swimming pools, washing yachts, holiday villas, and hotels?

The official language of St. Barthélemy is French; it is the first, and sometimes only, language spoken by locals (Maher 2013). Therefore, my research will be conducted almost exclusively in French. In addition to my pursuit of a degree in Environment and Sustainability which supports my scientific and policy knowledge and has prepared me to conduct a research project of this nature, I have been studying French for the past nine years. Beginning in middle school and continuing throughout high school, I am now pursuing a minor in French and French Studies at Sewanee.

Statement of Objectives

I plan to learn about the attitudes of local people from a small island community regarding waste disposal, freshwater production, and sustainability. My specific research question investigates choices made at the household level regarding the sorting of garbage, though I would like to expand that question to look at the bigger picture as well. How does this one small decision connect to their opinion of sustainability in the broader sense? If people are reluctant to participate in the sorting of waste, will they be reluctant to take other measures in the future to create a more sustainable society? To expand this even further, I would like to draw comparisons and see how the mindset and practices of the people of St. Barth connect to my own society and the world as a whole. Are there similarities between the inhabitants of this small island community and Sewanee, the United States, or even the world? In order to create a more sustainable global society, we must start by investigating the small choices made by the individual on a daily basis. This is the knowledge that I will seek in St. Barth.

Methodology/ Plan of Work

Interviews will be my primary means of research. Through Professor Fielding I am in communication with H el ene Bernier, a local environmental activist and tenth-generation island native, as an initial contact. From there, I will survey a sample of local people. The goal is to interview a variety of participants which vary based on age, gender, occupation, socioeconomic status, etc. I hope that I can prearrange some interviews by networking through H el ene, but ideally I will also create more spur-of-the-moment conversation in the field. To organize my work, I will have a list of questions that would be written beforehand in order to keep my interviews consistent. With permission from the interviewees, I will record interviews to

reference later. In addition, I will list basic information about the person (age, gender, occupation, etc). If participants are not comfortable being recorded, I will instead take notes which highlight the main points of the conversation (these would begin as shorthand but later would be written out in more detail). To analyze the data, responses will be coded in categories based on similarity of opinion or theme and then reviewed to draw conclusions. Potential challenges to my work may include unwillingness of some potential interviewees to participate. Based on research by Julianne Maher (2013), however, the people are generally welcoming and happy to be interviewed. I believe that this weakness will be lessened by the fact that the community is very small, and I would be connected with H el ene and other respected residents who know virtually everyone on the island.

Timeline

July 11: Travel to St. Barth with Prof. Fielding

July 11-13: Orientation to island, meet major contacts, tour important facilities (with Fielding)

July 14: Fielding departs for research site on St. Vincent

July 13-Aug 10: Conduct interviews with local residents, incinerator officials, and environmental policymakers toward research questions

Aug 11-22: Investigate composting facility's progress and predicted effects on incinerator fuel supply

Statement of Impact

This project warrants intellectual merit because it will reveal an often unheard voice regarding sustainability. It can be said that sustainability itself is a "luxurious" topic, one that can only be considered by privileged members of capitalist Western societies who can afford to think beyond immediate needs. The research I hope to conduct in St. Barth will delve into the everyday, household level decisions made by residents of a culturally and historically unique island community. If individuals choose not to sort their waste, I want to understand why. If not

sustainability, what are the priorities of the residents of St. Barth? Furthermore, I think it is worth noting that islands in general are more susceptible and vulnerable to environmental threats such as climate change, resource exhaustion, and natural disasters. The pressure that island nations currently feel can in some ways reflect how everyone on the planet will feel in coming generations. As climate change worsens and resources become increasingly depleted, everyone may have to adopt the mindset of islanders. For this reason, investigation of attitudes towards sustainability in St. Barth will offer valuable insights that will apply to the bigger picture.

Personally, I find this project stimulating and pertinent to my future goals, for it is my hope that creating sustainable communities can be incorporated into a career someday. This project would be a perfect starting place for these aspirations and would allow me to utilize my knowledge of French simultaneously. Overall, investigating waste disposal choices made by the residents of St. Barth will reflect attitudes about sustainability that may differ greatly from those which I have encountered at Sewanee (or more broadly in the United States and perhaps also in France). Gaining this world perspective would be invaluable and would help me, and hopefully others, to understand the place sustainability holds in the lives of people of different cultures.

Practical Details

Proposed Dates: July 11th-August 22nd

Local contact: H el ene Bernier and Didier Laplace, who will also help with housing arrangements. I am working to arrange a homestay with a local family.

Language Training: As I mentioned before, I have been studying French since middle school. My senior year of high school, I was able to participate in an exchange with a student from a French boarding school. Before I transferred to Sewanee, I studied French at The University of Colorado at Boulder where I took courses in phonetics and pronunciation, as well as writing. I traveled to France two summers ago where I worked on a farm near Aix-en-Provence and lived

with a French family. At Sewanee, I have taken two courses in French literature and a course in French-English translation.

Visa Requirements: There are none for Americans.

Bibliography

Fielding, Russell. 2014. "The Good Garbage": Waste to Water in the Small Island Environment of St. Barthélemy. *Focus on Geography*. 57(1): 1-13.

Maher, Julianne. 2013. *The Survival of People and Languages*. Koninklijke Brill NV. Leiden, The Netherlands.

Additional sources I plan to use:

Barr, Steward. 2007. Factors Influencing Environmental Attitudes and Behaviors. *Environment and Behavior*. 39(4): 435-473.

Corti, Alberto. 2013. Differentiating the Methods of Waste Treatment in the Wider Caribbean Region. Unpublished M.S. Thesis. University of Uppsala.

Rodríguez, María Elena Díaz Barriga. 2011. Cost-Benefit Analysis of a Waste-to-Energy Plant for Montevideo and Waste-to-Energy in Small Islands. Unpublished M.S. Thesis. Columbia University.

Budget

Airfare	Nashville (BNA) to St. Maarten (SXM), American Airlines	\$800
Airfare	St. Maarten (SXM) to St. Barthélemy (SBH), St. Barth Commuter	\$200
Lodging	Accommodation in private home, TBD	\$1100
Food	\$150/week for six weeks.	\$900
Ground transport	Rental car or scooter as needed, plus fuel	\$1000
Total		\$4000

